

**NOTICE OF DRAFTSPERSON'S
PATENT DRAWING REVIEW**

The drawing(s) filed (insert date) 6-9-99 are:

- A. approved by the Draftsperson under 37 CFR 1.84 or 1.152.
 B. objected to by the Draftsperson under 37 CFR 1.84 or 1.152 for the reasons indicated below. The Examiner will require submission of new, corrected drawings when necessary. Corrected drawing must be submitted according to the instructions on the back of this notice.

<p>1. DRAWINGS. 37 CFR 1.84(a): Acceptable categories of drawings: Black ink. Color. ___ Color drawings are not acceptable until petition is granted. Fig(s) _____ ___ Pencil and non black ink not permitted. Fig(s) _____</p> <p>2. PHOTOGRAPHS. 37 CFR 1.84(b) ___ 1 full-tone set is required. Fig(s) _____ ___ Photographs may not be mounted. 37 CFR 1.84(e) ___ Poor quality (half-tone). Fig(s) _____</p> <p>3. TYPE OF PAPER. 37 CFR 1.84(c) ___ Paper not flexible, strong, white, and durable. Fig(s) _____ ___ Erasures, alterations, overwritings, interlineations, folds, copy machine marks not accepted. Fig(s) _____ ___ Mylar, velum paper is not acceptable (too thin). Fig(s) _____</p> <p>4. SIZE OF PAPER. 37 CFR 1.84(f): Acceptable sizes: ___ 21.0 cm by 29.7 cm (DIN size A4) ___ 21.6 cm by 27.9 cm (8 1/2 x 11 inches) ___ All drawing sheets not the same size. Sheet(s) _____ ___ Drawings sheets not an acceptable size. Fig(s) _____</p> <p>5. MARGINS. 37 CFR 1.84(g): Acceptable margins: Top 2.5 cm Left 2.5cm Right 1.5 cm Bottom 1.0 cm SIZE: A4 Size Top 2.5 cm Left 2.5 cm Right 1.5 cm Bottom 1.0 cm SIZE: 8 1/2 x 11 Margins not acceptable. Fig(s) _____ ___ Top (T) ___ Left (L) ___ Right (R) ___ Bottom (B)</p> <p>6. VIEWS. 37 CFR 1.84(h) REMINDER: Specification may require revision to correspond to drawing changes. Partial views. 37 CFR 1.84(h)(2) ___ Brackets needed to show figure as one entity. Fig(s) _____ ___ Views not labeled separately or properly. Fig(s) <u>1A-5C</u> ___ Enlarged view not labeled separately or properly. Fig(s) _____</p> <p>7. SECTIONAL VIEWS. 37 CFR 1.84 (h)(3) ___ Hatching not indicated for sectional portions of an object. Fig(s) _____ ___ Sectional designation should be noted with Arabic or Roman numbers. Fig(s) _____</p>	<p>8. ARRANGEMENT OF VIEWS. 37 CFR 1.84(i) ___ Words do not appear on a horizontal, left-to-right fashion when page is either upright or turned so that the top becomes the right side, except for graphs. Fig(s) _____</p> <p>9. SCALE. 37 CFR 1.84(k) ___ Scale not large enough to show mechanism without crowding when drawing is reduced in size to two-thirds in reproduction. Fig(s) _____</p> <p>10. CHARACTER OF LINES, NUMBERS, & LETTERS. 37 CFR 1.84(l) ___ Lines, numbers & letters not uniformly thick and well defined, clean, durable, and black (poor line quality). Fig(s) _____</p> <p>11. SHADING. 37 CFR 1.84(m) ___ Solid black areas pale. Fig(s) _____ ___ Solid black shading not permitted. Fig(s) _____ ___ Shade lines, pale, rough and-blurred. Fig(s) _____</p> <p>12. NUMBERS, LETTERS, & REFERENCE CHARACTERS. 37 CFR 1.84(p) ___ Numbers and reference characters not plain and legible. Fig(s) _____ ___ Figure legends are poor. Fig(s) _____ ___ Numbers and reference characters not oriented in the same direction as the view. 37 CFR 1.84(p)(1) Fig(s) _____ ___ English alphabet not used. 37 CFR 1.84(p)(2) Figs _____ ___ Numbers, letters and reference characters must be at least .32 cm (1/8 inch) in height. 37 CFR 1.84(p)(3) Fig(s) _____</p> <p>13. LEAD LINES. 37 CFR 1.84(q) ___ Lead lines cross each other. Fig(s) _____ ___ Lead lines missing. Fig(s) _____</p> <p>14. NUMBERING OF SHEETS OF DRAWINGS. 37 CFR 1.84(t) ___ Sheets not numbered consecutively, and in Arabic numerals beginning with number 1. Sheet(s) _____</p> <p>15. NUMBERING OF VIEWS. 37 CFR 1.84(u) ___ Views not numbered consecutively, and in Arabic numerals, beginning with number 1. Fig(s) _____</p> <p>16. CORRECTIONS. 37 CFR 1.84(w) ___ Corrections not made from prior PTO-948 dated _____</p> <p>17. DESIGN DRAWINGS. 37 CFR 1.152 ___ Surface shading shown not appropriate. Fig(s) _____ ___ Solid black shading not used for color contrast. Fig(s) _____</p>
<p>COMMENTS</p>	

REVIEWER J. CHASE DATE 12-30-02 TELEPHONE NO. 703 305 8420

ATTACHMENT TO PAPER NO. 21